

**PCT**

NOTIFICATION OF TRANSMITTAL  
OF COPIES OF TRANSLATION  
OF THE INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY  
(CHAPTER I OR CHAPTER II  
OF THE PATENT COOPERATION TREATY)  
(PCT Rule 72.2)

From the INTERNATIONAL BUREAU

To:

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Date of mailing (day/month/year)  
14 July 2005 (14.07.2005)

Applicant's or agent's file reference  
Z3918/3GE505

**IMPORTANT NOTIFICATION**

International application No.  
PCT/JP2003/014463

International filing date (day/month/year)  
13 November 2003 (13.11.2003)

Applicant

ZEPHYR CORPORATION et al

**1. Transmittal of the translation to the applicant.**

The International Bureau transmits herewith a copy of the English translation made by the International Bureau of the international preliminary examination report established by the International Preliminary Examining Authority.

**2. Transmittal of the copy of the translation to the elected Offices.**

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following elected Offices requiring such translation:

CN, EP

The following elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AU, JP, US

**3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).**

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report.

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

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Translation

PATENT COOPERATION TREATY

PCT/JP2003/014463



PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference Z3918/3GE505	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/JP2003/014463	International filing date (day/month/year) 13 November 2003 (13.11.2003)	Priority date (day/month/year) 15 November 2002 (15.11.2002)
International Patent Classification (IPC) or national classification and IPC H02P 9/00		
Applicant ZEPHYR CORPORATION		

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>	
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>	

Date of submission of the demand 21 April 2004 (21.04.2004)	Date of completion of this report 31 January 2005 (31.01.2005)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2003/014463

## Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is language of a translation furnished for the purpose of:

- ☐ international search (under Rules 12.3 and 23.1(b))  
☐ publication of the international application (under Rule 12.4)  
☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

☒ The international application as originally filed/furnished

☐ the description:

pages \_\_\_\_\_, as originally filed/furnished

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☐ the claims:

pages \_\_\_\_\_, as originally filed/furnished

pages\* \_\_\_\_\_, as amended (together with any statement) under Article 19

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☐ the drawings:

pages \_\_\_\_\_, as originally filed/furnished

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages \_\_\_\_\_

☐ the claims, Nos. \_\_\_\_\_

☐ the drawings, sheets/figs \_\_\_\_\_

☐ the sequence listing (*specify*): \_\_\_\_\_

☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages \_\_\_\_\_

☐ the claims, Nos. \_\_\_\_\_

☐ the drawings, sheets/figs \_\_\_\_\_

☐ the sequence listing (*specify*): \_\_\_\_\_

☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims	1-18	YES
	Claims		NO
Inventive step (IS)	Claims	4-8, 15, 18	YES
	Claims	1-3, 9-14, 16, 17	NO
Industrial applicability (IA)	Claims	1-18	YES
	Claims		NO

**2. Citations and explanations**

Document 1: JP 1-142274 A (Mitsui & Co., Ltd.), 05 June, 1989

Document 2: Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No. 55405/1987 (Laid-open No. 162975/1988) (Mitsubishi Heavy Industries, Ltd.), 25 October, 1988

Document 3: JP 2001-268994 A (Sanken Electric Co., Ltd.), 28 September, 2001

Document 4: JP 2002-136192 A (Sanken Electric Co., Ltd.), 10 May, 2002

Document 5: JP 2002-315395 A (Mitsubishi Heavy Industries, Ltd.), 25 October, 2002

Document 6: JP 8-107637 A (Shinko Electric Co., Ltd.), 23 April, 1996

Document 7: JP 2002-27679 A (Mitsubishi Heavy Industries, Ltd.), 25 January 2002

The invention set forth in claim 1 does not involve an inventive step in the light of documents 1 and 2 cited in the international search report. It would be easy for a person skilled in the art to use the fixed pitch angle windmill, which is disclosed in document 2, in the power generator disclosed in document 1.

The inventions set forth in claims 2 and 3 do not involve an inventive step in the light of documents 1, 2, and 6 cited in the international search report. It would be easy for a person skilled in the art to combine the power generator disclosed in document 1 with a solar-powered generator, such as that disclosed in document 6.

The inventions set forth in claims 9-11 do not involve an inventive step in the light of documents 1-3 cited in the international search report. It would be easy for a person skilled in the art to configure the power generator disclosed in document 1 in the manner described in document 3 so that any increase in rotational speed is suppressed by raising the output voltage of the power converter.

The inventions set forth in claims 12 and 13 do not involve an inventive step in the light of documents 1, 2 and 4 cited in the international search report. It would be easy for a person skilled in the art to configure the power generator disclosed in document 1 in the manner described in document 4 so that any increase in rotational speed is suppressed by increasing the ratio of the input voltage to the output voltage of the power converter.

The inventions set forth in claims 14 and 16 do not involve an inventive step in the light of documents 2 and 5 (page 3, left column, line 48 to right column, line 11) cited in the international search report. It would be easy for a person skilled in the art to provide the short-circuiting means disclosed in document 5 to the power generator that uses a fixed pitch angle windmill, which is disclosed in document 2.

The invention set forth in claim 17 does not involve an inventive step in the light of document 2 cited in the international search report and newly cited document 7 (page 4, left column, lines 1-11). It would be easy for a person skilled in the art to provide the means for predicting windmill output disclosed in document 7 to the power generator that uses a fixed pitch angle windmill, which is disclosed in document 2.

The inventions set forth in claims 4-8, 15 and 18 are not disclosed in any of the documents cited in the international search report and are not obvious to a person skilled in the art.